

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number
WO 2004/109097 A1

(51) International Patent Classification⁷: **F03B 17/06**,
F03D 3/02, 3/06, 9/00

(21) International Application Number:
PCT/CA2003/002034

(22) International Filing Date:
31 December 2003 (31.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2,432,458 6 June 2003 (06.06.2003) CA

(71) Applicant and

(72) Inventor: **HENKENHAF, Willi** [CA/CA]; 48602 30th
Sideroad, RR # 1, Shelbourne, Ontario L0N 1S5 (CA).

(74) Agent: **CLARKE, Gordon, S.**; Barrister & Solicitor, 180
Bartlett Blvd., Collingwood, Ontario L9Y 5C9 (CA).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

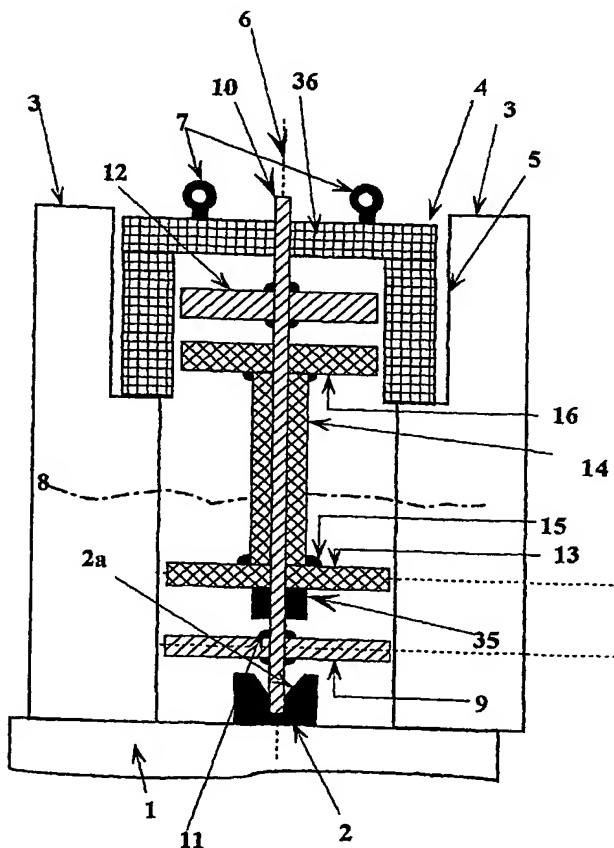
(84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— as to the identity of the inventor (Rule 4.17(i)) for all designations

[Continued on next page]

(54) Title: FLUID ACTIVATED WHEEL/GENERATOR PAIR



(57) Abstract: The invention provides a pair of co-rotating fluid powered wheel and generator pairs each rotating about a single vertical axis. Each wheel/generator is mounted on a respective axle one of which is solid and the other tubular. Separation of fluid flow into 2 streams engages the wheels for rotation in opposite directions. Folding paddles collapse and extend to engage the moving fluid.



- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
- of inventorship (Rule 4.17(iv)) for US only

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- with international search report